



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,273	12/05/2003	Ramon Kuczera	G00366/US	1611

35758 7590 03/07/2005

GKN DRIVELINE NORTH AMERICA, INC  
3300 UNIVERSITY DRIVE  
AUBURN HILLS, MI 48326

EXAMINER
----------

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/729,273

Applicant(s)

KUCZERA ET AL.

Examiner

Greg Binda

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/5/03
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

*Election/Restrictions*

1. Applicant's election without traverse of Species I shown in Fig. 3 in the reply filed on Feb 16, 2005 is acknowledged.
2. Claims 10-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on Feb 16, 2005.

*Information Disclosure Statement*

3. The information disclosure statement filed 12/5/03 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

*Drawings*

4. The drawings are objected to because in Fig. 7 the reference character "E" should be changed to "IE" (see paragraph 0041). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be

Art Unit: 3679

canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### *Claim Objections*

5. The claims are objected to as failing to comply with 37 CFR 1.75(g) because the least restrictive claim, claim 9, is not presented as claim number 1.

#### *Claim Rejections - 35 USC § 112*

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 8 & 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With regard to a "grease

Art Unit: 3679

cover” the claims recite that said grease cover is both “sealingly attached” and “displaceable”.

There is no corresponding description in the specification of a grease cover with such capabilities.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-9 & 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, line 8; claim 9, line 8; and claim 19, line 9, each recite “an axis” but do not identify to what part this axis is an axis of.

*Claim Rejections - 35 USC § 103*

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 9, 19 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Booker et al, US 6,585,601 (Booker).

a. Claims 1, 9 & 19. The admitted prior art (see paragraph 0008) discloses a constant velocity cross groove hybrid joint comprising all the limitations in claim 1, lines 1-4, claim 9, lines 1-14; and claim 19, lines 1-16, 21 & 22. The joint of the admitted

prior art does not however necessarily include an energy absorption surface that interferes with at least one of the torque transmitting balls when the joint is operated beyond its normal axial plunge range. Booker shows a constant velocity which includes an energy absorption surface 34 that interferes with torque transmitting balls 28 when the joint is operated beyond its normal axial plunge range. Booker teaches, at col. 1, lines 58+, that providing a constant velocity joint with such an energy absorption surface provides means to control the collapsing force profile without adding to the complexity and cost of the joint. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cross groove hybrid joint of the admitted prior art by including an energy absorption surface that interferes with at least one of the torque transmitting balls when the joint is operated beyond its normal axial plunge range in order to provide means to control the collapsing force profile without adding to the complexity and cost of the joint as taught by Booker

b. Claim 20. Booker shows the constant velocity joint comprising a grease cap 44. Booker teaches in col. 4, lines 32-35, providing a constant velocity joint with a grease cap in order to provide a means for retaining lubricant and for absorbing energy. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the cross groove hybrid joint of the admitted prior art by including a grease cap in order to provide a means for retaining lubricant and for absorbing energy as taught by Booker.

Art Unit: 3679

12. Claims 2-8 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Booker as applied to claims 1, 9, 19 & 20 above, and further in view of Krude et al, US 4,202,184 (Krude).

a. Claims 2, 3, 6-8 & 18. The combination of the admitted prior art and Booker includes all the limitations of the claims except a deformable annular circlip. Krude teaches, at col. 5, lines 6-10, using a deformable annular circlip 15 in order to provide the grease cap of a constant velocity joint with attachment means and additional sealing means. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of the admitted prior art and Booker by including a deformable annular circlip in order to provide the grease cap of the combination with attachment means and additional sealing means as taught by Krude.

b. Claims 4 & 5. Krude does not expressly disclose making the circlip from metal or plastic. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the circlip from metal or plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boutin and Wagner each show a plunging constant velocity joint. Oakes shows energy absorbing surfaces 46.

Art Unit: 3679

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda  
Primary Examiner  
Art Unit 3679